

# **FOAM MOLDING DIE**

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Equivalents:

#### Abstract

PROBLEM TO BE SOLVED: To provide a foam molding die capable of easily producing a foamed sheet of good quality having no surface roughness and homogenous cells in low cost.

SOLUTION: A die main body 1 and a foaming/cooling part 2 provided at the lower part thereof are integrally constituted. Resin channel parts 4a, 4b are respectively provided and a lip part 5 for molding a molten resin 10 into a predetermined shape is provided on the way of the channel parts. The resin channel part 4b of the foaming/cooling part 2 has a channel wall surface formed from a porous material 3. The cooling fluid 8 controlled in its temp. by a temp. control part 9 is supplied to the porous material 3 through a cooling fluid channel 7 and allowed to flow out of the surface of the porous material 3 to form a fluid layer. The fluid layer is interposed between the resin channel part 4b of the foaming/cooling part 2 and a foamed molten resin 10'. The foamed molten resin 10' is cooled by a cooling layer 8a while allowed to advance downstream.

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Extruder die for moulding foam - includes cooling portion, through which cooling fluid form layer around fused resin

Patent Assignee: MITSUBISHI JUKOGYO KK

# **Patent Family**

Patent Number Kind	Date	<b>Application Number</b>	Kind	Date	Week T	ype
JP 11235746 A	19990831	JP 9838257	A	19980220	199946 B	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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### **Patent Details**

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#### Abstract:

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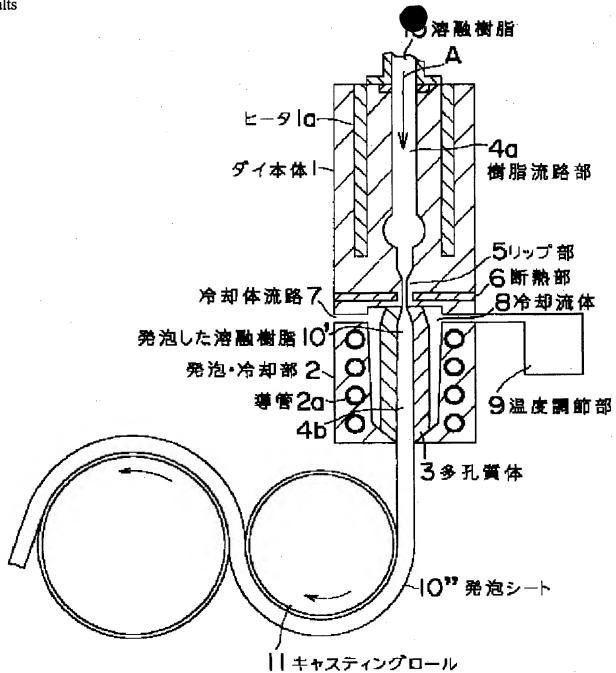
NOVELTY - In the cooling portion (2) of die (1), a porous unit (3) is provided adjoining the walls of resin flow path (4b). Cooling fluid (8) is supplied through flow paths (7) to the porous unit which exudes fluid to the resin flow path to form fluid layer so that fused resin (10') is cooled.

USE - Used for foam extrusion moulding of plastics.

ADVANTAGE - Since fluid layer is formed by flowing from porous unit and cooling fused resin, foamed product is of good quality with homogeneous air bubbles.

DESCRIPTION OF DRAWING - The figure shows the moulding assembly for fused foam resin. (1) Die; (2) Cooling portion; (3) Porous unit; (4b) Resin flow path; (8) Cooling fluid; and (10') Fused resin.

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